



ELSEVIER

Discrete Mathematics 191 (1998) 1–2

---

---

DISCRETE  
MATHEMATICS

---

---

## Preface

This special volume contains the most important papers presented at the *Conference on Graph Theory* held at *Elgersburg* (Thuringia, Germany) 6–10, May 1996.

The meeting was prepared by the Mathematical Institutes of the Technical Universities of Ilmenau and Cottbus. It continues a series of international colloquia on graph theory and its applications of a similar character, organized by graph theorists from Ilmenau and held at places with a beautiful scenery in the Thuringian Forest, since 1967: Manebach (1967), Oberhof (1977), Eyba (1984) and Eisenach (1990).

About 80 participants formed the audience of 54 lectures and talks on graph theoretical topics of current interest ranging from pure structure analysis (graph colouring, cycle structure, Ramsey numbers, ...) to applications in chemistry.

It has been our particular honour and pleasure to have our unforgotten friend and master Paul Erdős — Uncle Paul — among us who, in good humour, presented many new and challenging problems in his lecture.

The weather was really ideal: it was raining cats and dogs when the conference started and it was still raining, horses and elephants, when it terminated, thus preventing the participants from waisting their time in paying attention to spring or scenery.

The organizers — Jochen Harant, Ingo Schiermeyer, Michael Stiebitz and Hansjoachim Walther — and the editor thank the attendees for their participation, the authors for their contributions, the referees for their careful work, Barbara Hamann and Ute Leithold for their unvaluable assistance and the following institutions for financial support: Technische Universität Ilmenau, Brandenburgische Technische Universität Cottbus, Deutsche Forschungs-Gemeinschaft (Bonn) and International Science Foundation (New York). The editor is particularly indebted to Peter L. Hammer, Editor-in-Chief of *Discrete Mathematics*, for encouraging him to serve as a Guest Editor and to Nelly Segal for her permanent help and competent advice.

Horst Sachs

$$\prod_{p \leq n} p < 4^n$$

Handy-  $p \leq n$

Wright  $m+1 = 2m+1$

$$\binom{2m+1}{m} < 4^m$$

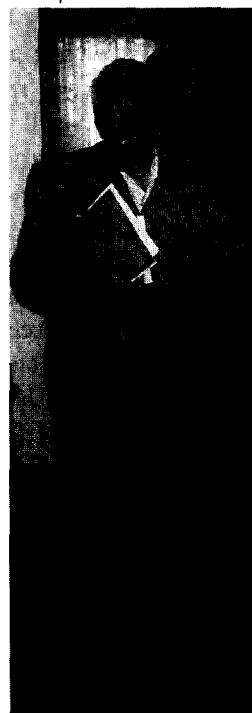
$$p \mid \binom{2m+1}{m}$$

$$\prod_{p \leq 2m+1} p < \binom{2m+1}{m} \prod_{p \leq 2m+1} p$$

$$p \leq 2m+1$$

$$4^m$$

$$4^{m+1}$$



Uncle Paul shows some students how to prove a famous theorem on prime numbers.

Photographs: Frank Schulte